

ABSTRACT

An acoustic insulating glazing unit including at least two substrate sheets, joined together around their periphery using a device that forms a sealed joint and a spacer frame, which device, with the two substrate sheets, defines a flat cavity filled with a gas. At least one microcavity is formed over at least part of the periphery of the cavity, constituting a zone of thermoviscous losses from the cavity along at least one of internal walls of the two substrate sheets by which the cavity is bounded. Dimensions of the at least one microcavity are chosen to promote propagation of some of the acoustic waves from the cavity into the microcavity, generating thermoviscous losses and thus reducing acoustic energy of the cavity. A mechanism is provided to contain the acoustic waves escaping from the microcavity.